

The Opportunity Atlas

Mapping the Childhood Roots of Social Mobility

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Census Scientific Advisory Committee

Disclaimer: Any opinions and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Census Bureau. All results have been reviewed to ensure that no confidential information is disclosed. The statistical summaries reported in these slides have been cleared by the Census Bureau's Disclosure Review Board release authorization number CBDRB-FY18-319. All values in the tables and figures that appear in this presentation have been rounded to four significant digits as part of the disclosure avoidance protocol. Unless otherwise noted, source for all tables and figures: authors calculations based on Census 2000 and 2010, tax returns, and American Community Surveys 2005-2015.

Opportunity Atlas

- Comprehensive census tract-level atlas of children's outcomes in adulthood
- Children's earnings distributions, incarcerations rates, and other outcomes in adulthood by parental income, race, and gender
- Users can view data for every census tract in America, overlay their own data, export into a data set for their own analysis

Data Sources and Sample Definitions

- Data sources: Census data (2000, 2010, ACS) covering U.S. population linked to federal income tax returns from 1989-2015
- Link children to parents based on dependent claiming on tax returns
- Target sample: Children in 1978-83 birth cohorts who were born in the U.S. or are authorized immigrants who came to the U.S. in childhood
- Analysis sample: 20.5 million children, 96% coverage rate of target sample

Variable Definitions

- Parents' pre-tax household incomes: mean Adjusted Gross Income from 1994-2000, assigning non-filers zeros
- Children's pre-tax incomes measured in 2014-15 (ages 31-37)
 - Non-filers assigned incomes based on W-2's (available since 2005)
- To mitigate lifecycle bias, focus on percentile ranks: rank children relative to others in their birth cohort and parents relative to other parents
- Also examine other outcomes: marriage, teenage birth, incarceration, ...

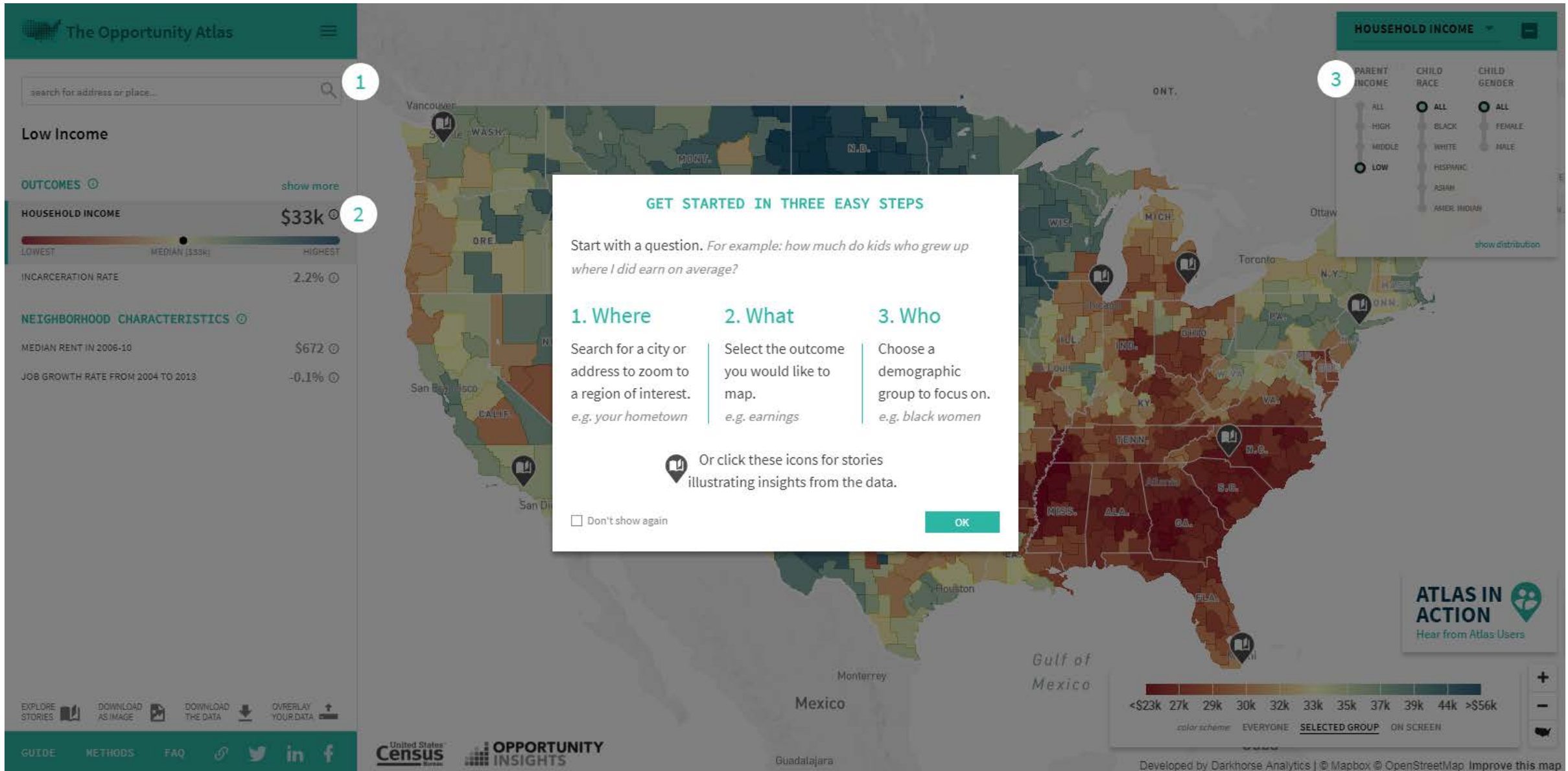
Estimating Mean Outcomes by Tract

- In each tract c , for each race r and gender g , regress children's outcomes on a smooth function of parent rank:

$$y_{icprg} = \alpha_{crg} + \beta_{crg} \times f_{rg}(p_{icrg}) + \varepsilon_{icprg}$$

- In practice, many children move across tracts in childhood
 - Weight children in each tract-level regression by fraction of childhood (up to age 23) spent in that tract

*For additional technical details see Chetty, Hendren, Jones, Porter 2018.





Tract 06037242600, South Los Angeles, Los Angeles, CA

OUTCOMES [show more](#)

HOUSEHOLD INCOME

\$22k

LOWEST MEDIAN (\$44k) HIGHEST

INCARCERATION RATE

7.1%

NEIGHBORHOOD CHARACTERISTICS

MEDIAN RENT IN 2006-10

\$505

JOB GROWTH RATE FROM 2004 TO 2013

17%

EXPLORE STORIES

DOWNLOAD AS IMAGE

DOWNLOAD THE DATA

OVERLAY YOUR DATA

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HOUSEHOLD INCOME

PARENT INCOME

ALL

HIGH

MIDDLE

LOW

CHILD RACE

ALL

BLACK

WHITE

HISPANIC

ASIAN

AMER. INDIAN

CHILD GENDER

ALL

FEMALE

MALE



<\$10k \$21k \$31k \$42k \$56k \$73k >\$96k

color scheme: EVERYONE SELECTED GROUP ON SCREEN

[hide distribution](#)



United States Census Bureau

OPPORTUNITY INSIGHTS

Developed by Darkhorse Analytics | © Mapbox © OpenStreetMap [Improve this map](#)



search for address or place...

Tract 06037242600, South Los Angeles, Los Angeles, CA

OUTCOMES

show more

HOUSEHOLD INCOME

\$24k

LOWEST

MEDIAN (\$34k)

HIGHEST

INCARCERATION RATE

6.3%

NEIGHBORHOOD CHARACTERISTICS

MEDIAN RENT IN 2006-10

\$505

JOB GROWTH RATE FROM 2004 TO 2013

17%

EXPLORE STORIES

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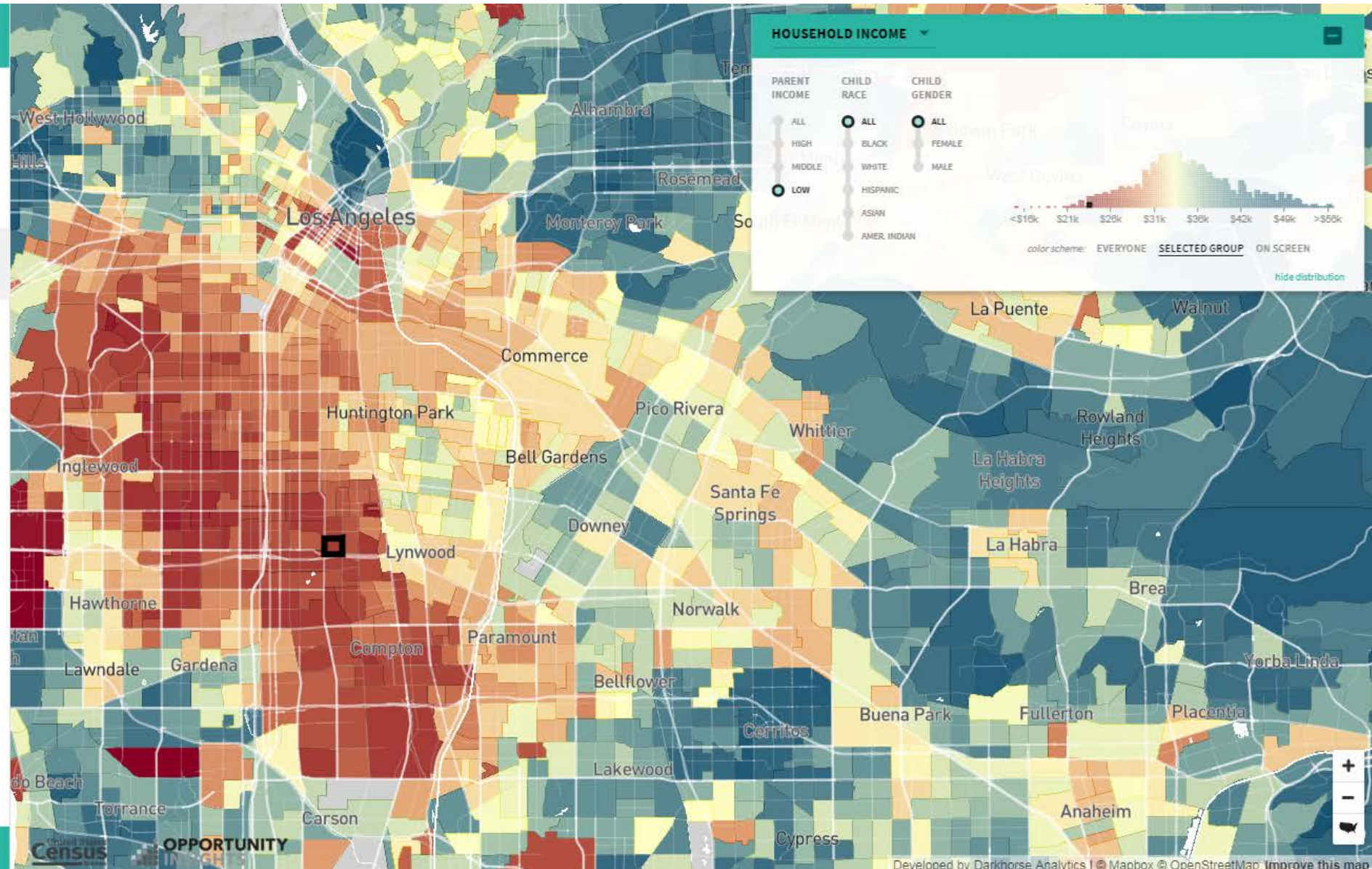
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search for address or place...

Tract 06037242600, South Los Angeles, Los Angeles, CA

OUTCOMES 

HOUSEHOLD INCOME

\$13k 

LOWEST

MEDIAN (\$24k)

HIGHEST

INCARCERATION RATE

14% 

NEIGHBORHOOD CHARACTERISTICS 

MEDIAN RENT IN 2006-10

\$505 

JOB GROWTH RATE FROM 2004 TO 2013

17% 

EXPLORE STORIES 

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HOUSEHOLD INCOME

PARENT INCOME

CHILD RACE

CHILD GENDER

ALL

HIGH

MIDDLE

LOW

ALL

BLACK

WHITE

HISPANIC

ASIAN

AMER. INDIAN

ALL

FEMALE

MALE

<\$10k

\$15k

\$19k

\$23k

\$27k

\$31k

\$35k

\$40k

>\$45k

color scheme: EVERYONE

SELECTED GROUP

ON SCREEN

hide distribution



 The Opportunity Atlas

Tract 06037242600, South Los Angeles, Los Angeles, CA

OUTCOMES [show more](#)

HOUSEHOLD INCOME **\$19k \$7.3k**

LOWEST MEDIAN (\$44k) HIGHEST

INCARCERATION RATE **N/A 27%**

EXPLORE STORIES

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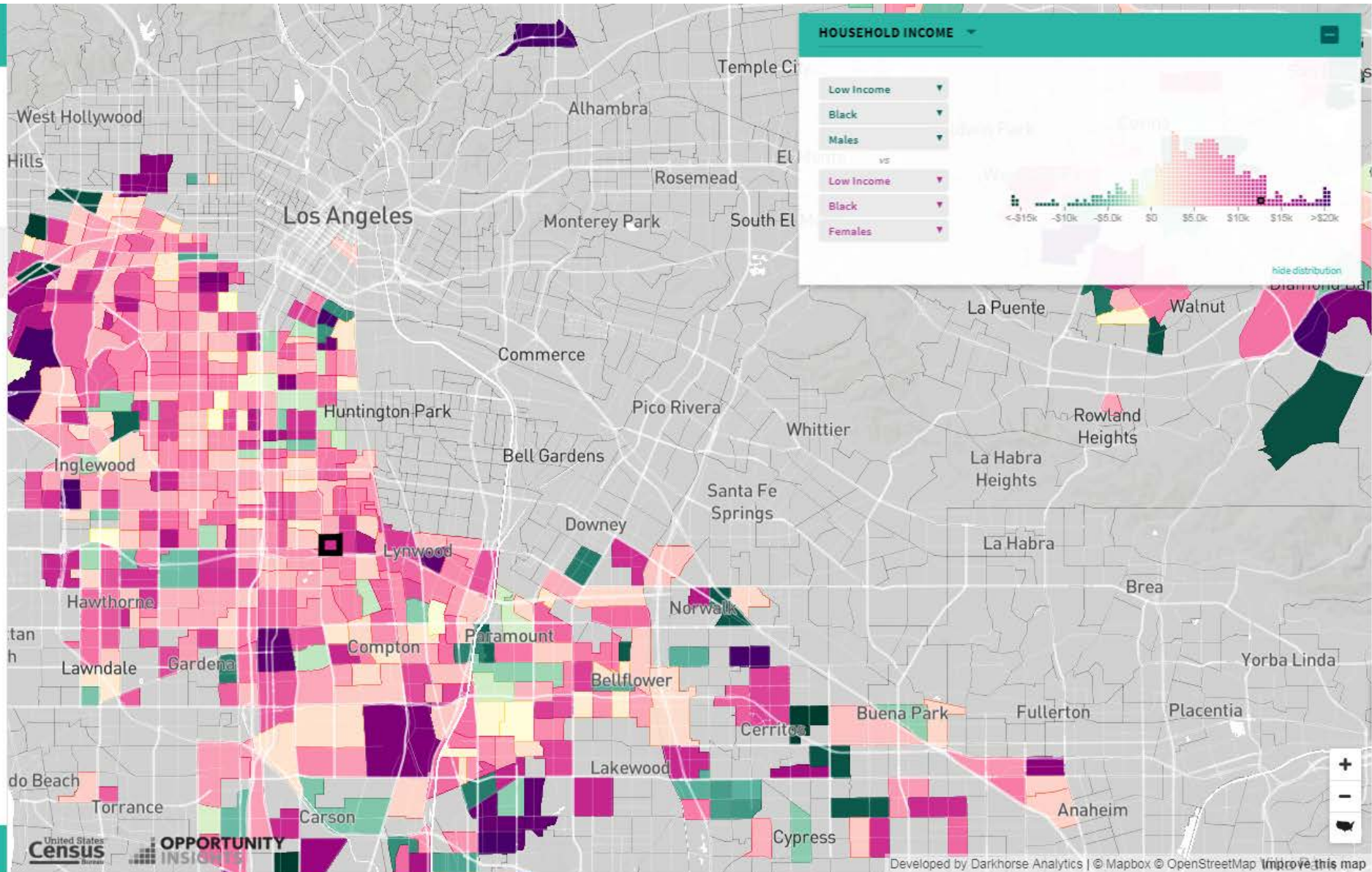
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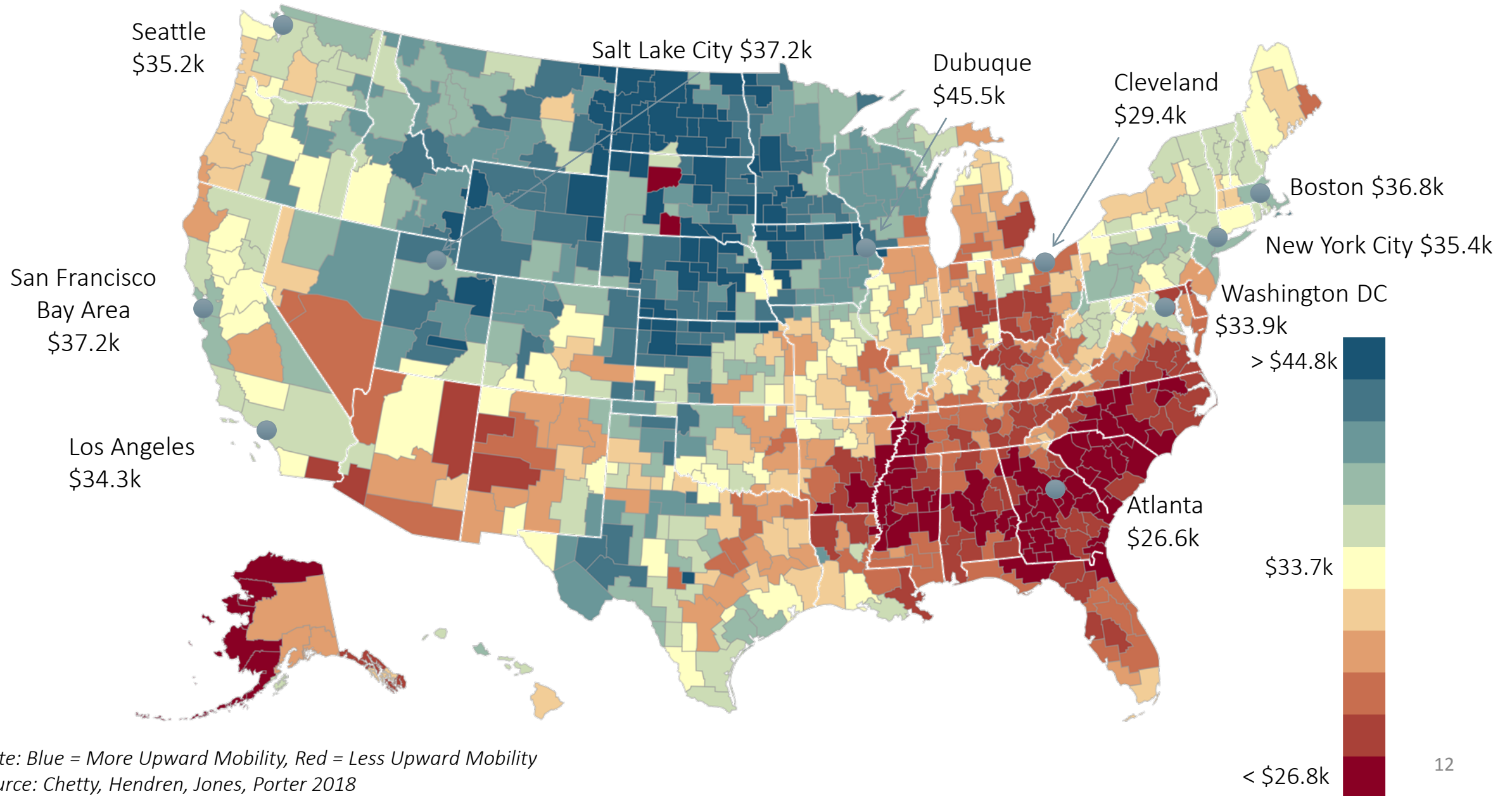
[return to map](#)

**Is Upward Mobility Higher
in Cities or Rural Areas?**

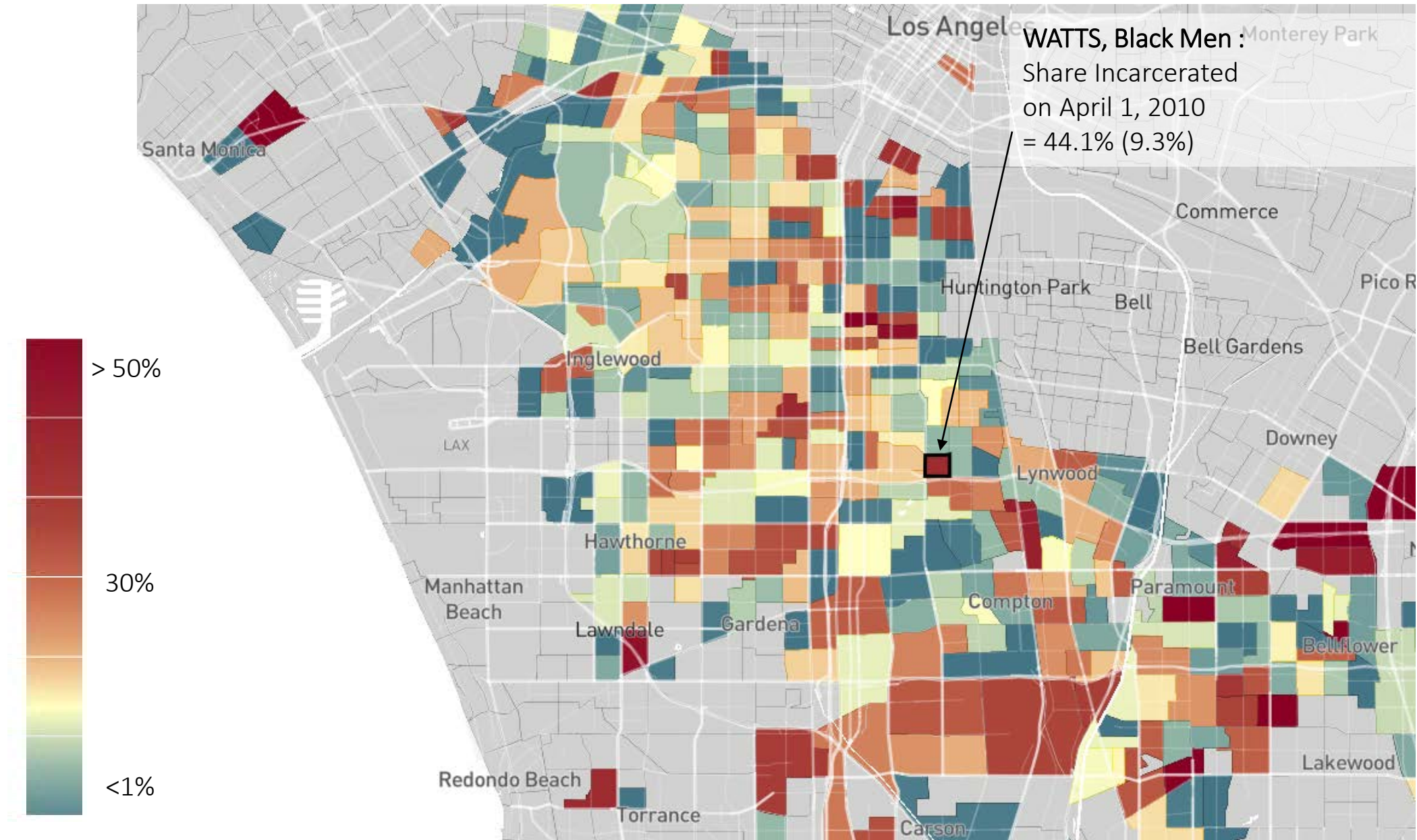


The Geography of Upward Mobility in the United States

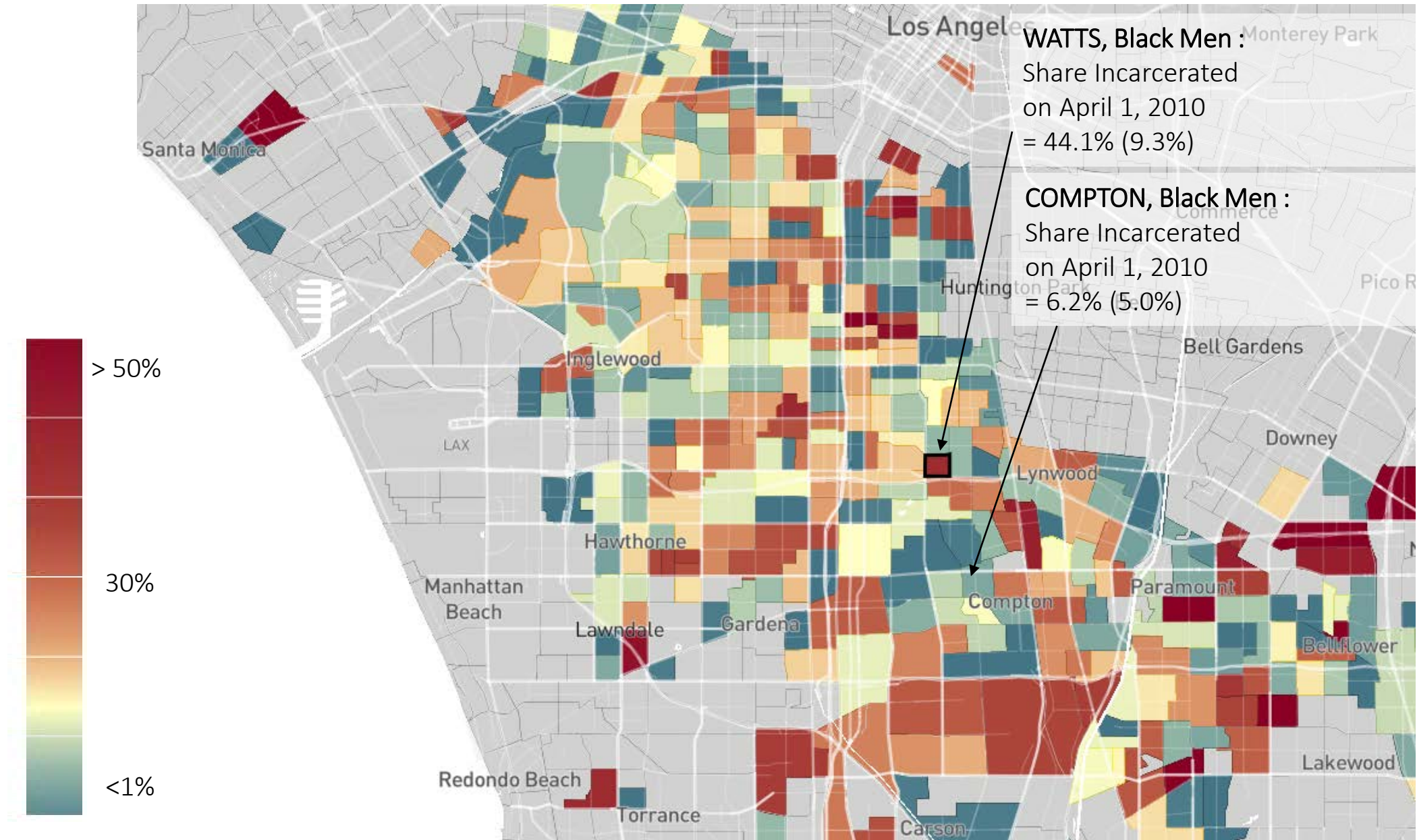
Average Household Income for Children with Parents Earning \$27,000 (25th percentile)



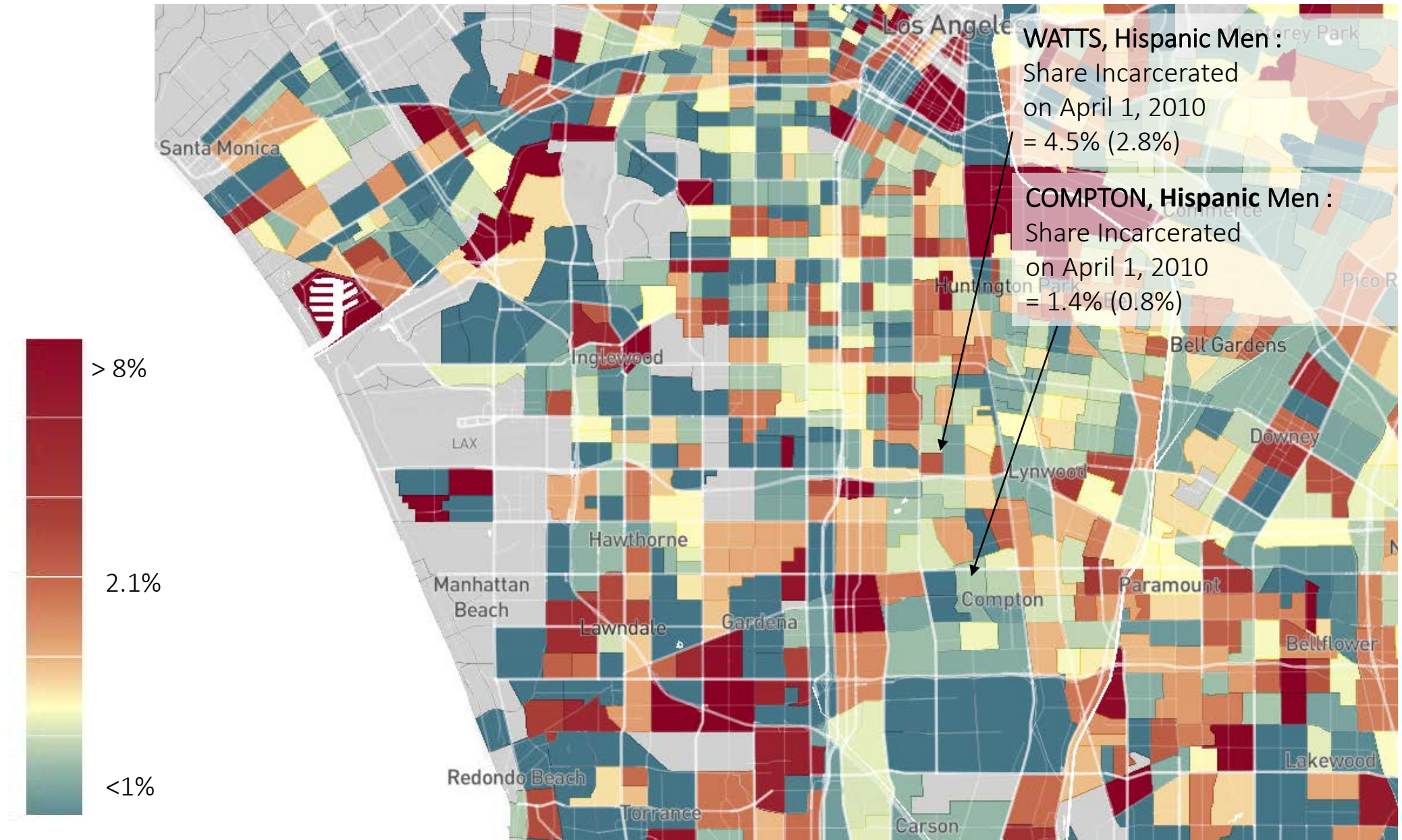
Incarceration Rates for Black Men in Los Angeles with Parents Earning < \$2,200 (1st percentile)



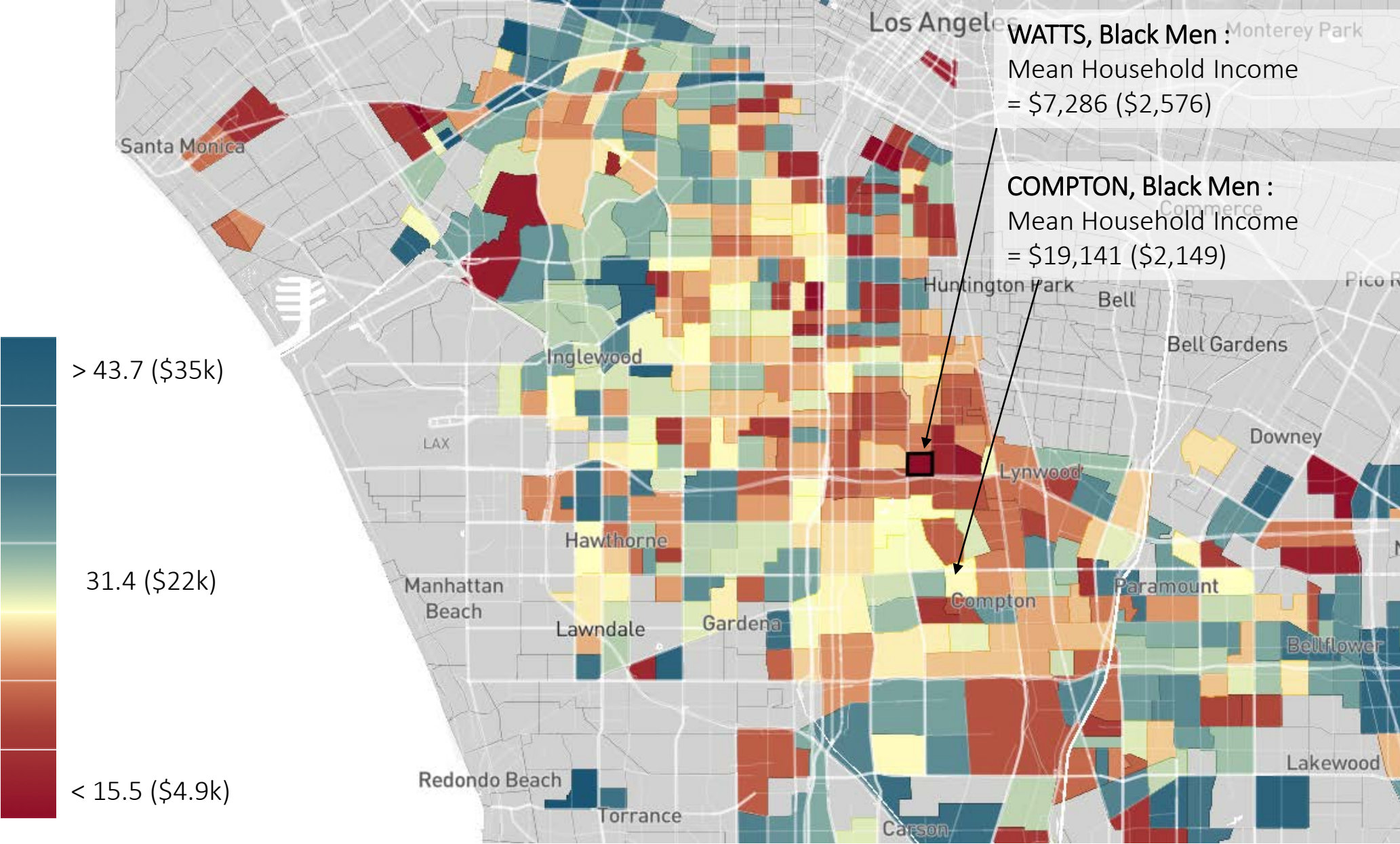
Incarceration Rates for Black Men in Los Angeles with Parents Earning < \$2,200 (1st percentile)



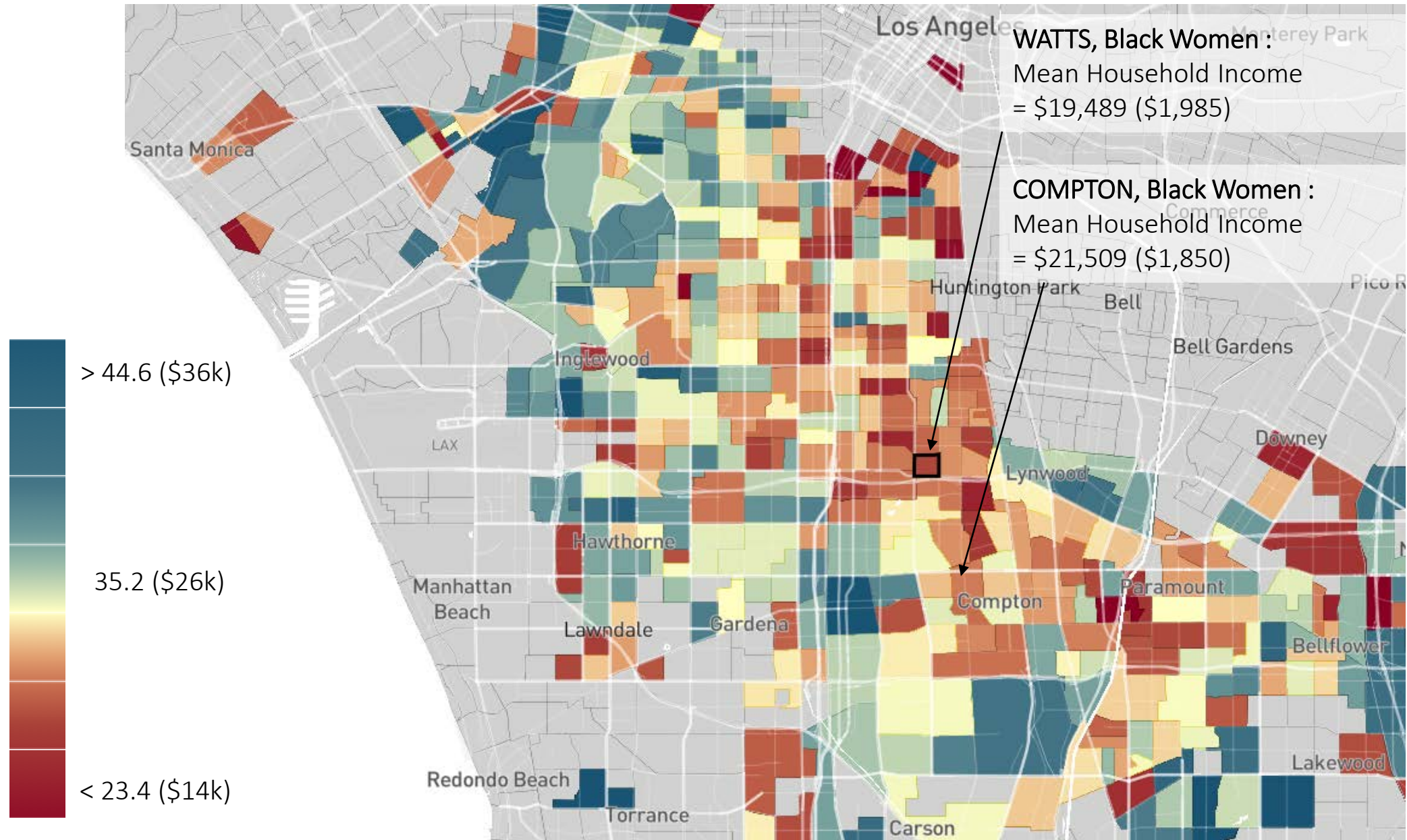
Incarceration Rates for Hispanic Men in Los Angeles with Parents Earning < \$2,200 (1st percentile)



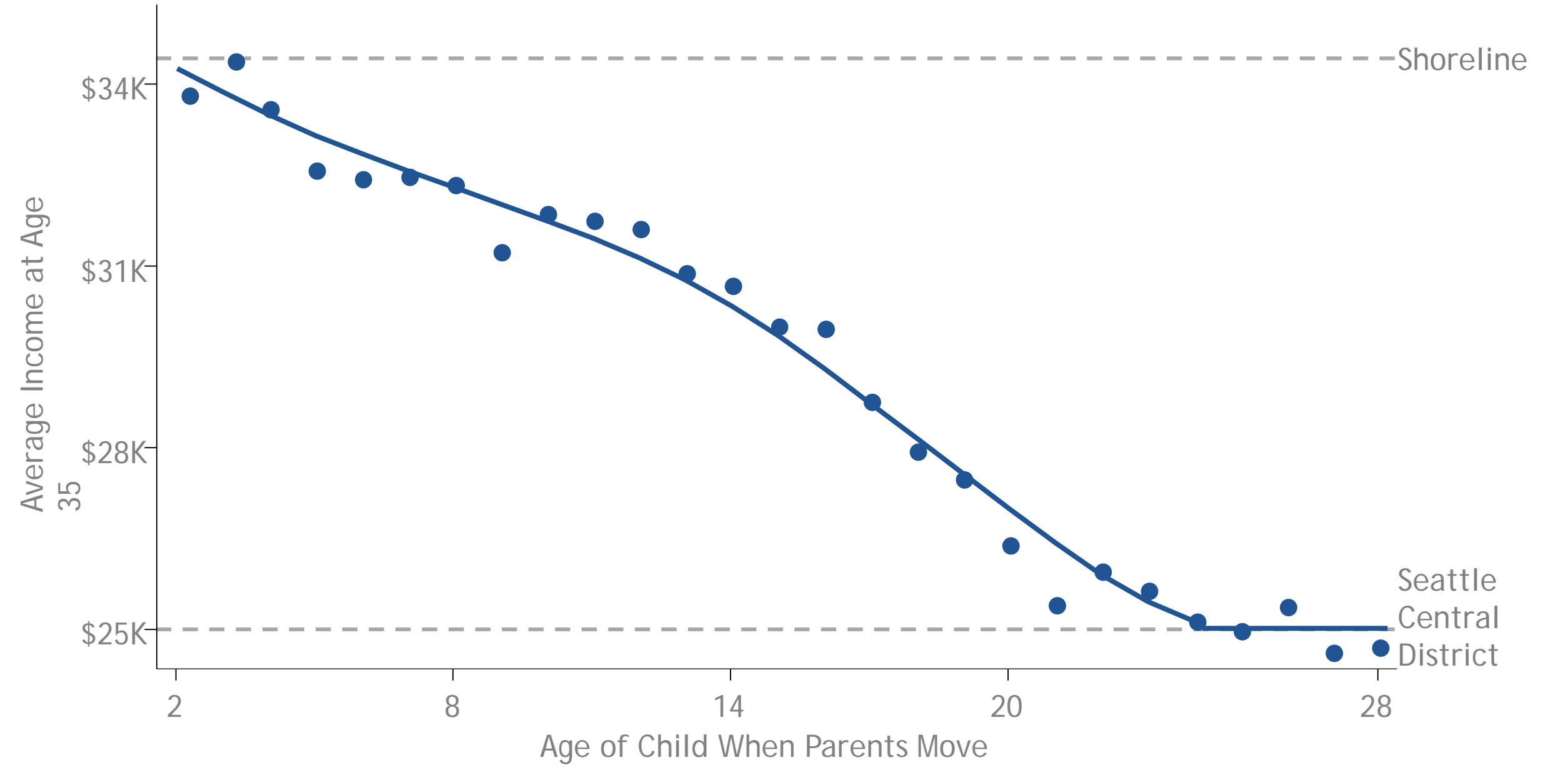
Mean Household Income for Black Men in Los Angeles with Parents Earning \$27,000 (25th percentile)



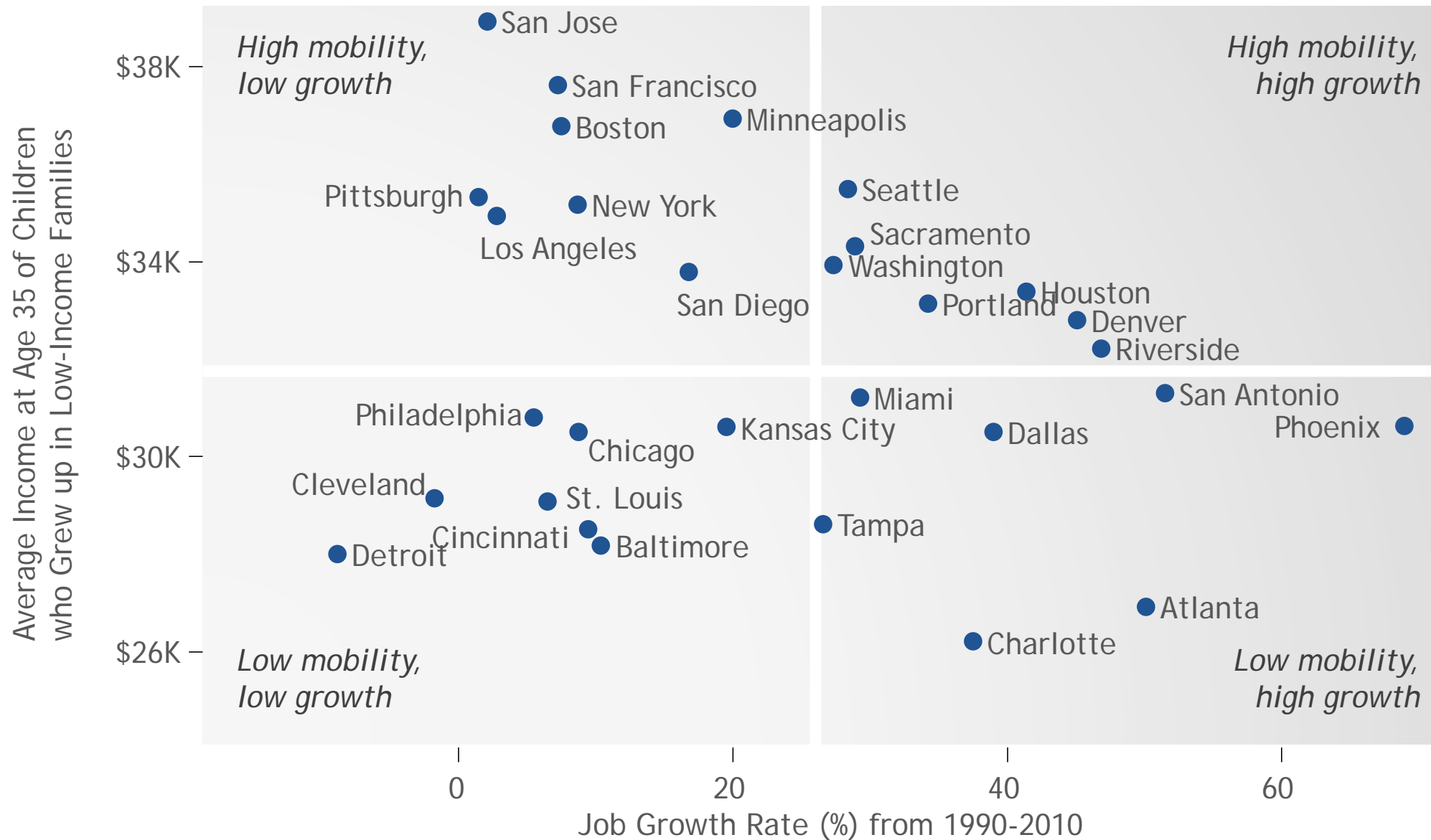
Mean Individual Income for Black Women in Los Angeles with Parents Earning \$27,000 (25th percentile)



Income Gain from Moving to a Better Neighborhood, by Child's Age at Move



Upward Mobility vs. Job Growth in the 30 Largest Metro Areas



Conclusions and Future Work

- Children's outcomes vary sharply across neighborhoods, and we can now measure and potentially address these differences with greater precision
- Determine feasibility of adding earlier cohorts starting in 1969
- Add cohorts after 1983 as the data are available
- Assess value of additional data sources
- Continued research on the determinants of intergenerational mobility